

Claims:

1. A method of producing a lead alloy strip for battery electrodes comprising extruding a lead alloy through a die block to produce an extrusion having a desired shape and rapidly cooling the extrusion to acquire a lead alloy grain size in the range of about  
5 10 to 300 microns.
2. In a method as claimed in claim 1, extruding the lead alloy in the shape of a tube extrusion, slitting and opening the tube, and rolling the opened tube into a planar strip prior to rapidly cooling the extrusion.
3. In a method as claimed in claim 1, extruding the lead alloy in the shape of a planar  
10 strip.
4. In a method as claimed in claim 1, extruding the lead alloy to produce an extrusion having a desired profile.
5. A method as claimed in claim 2 or 3, rapidly cooling the planar strip under tension and winding the cooled strip into a coil.
- 15 6. A method as claimed in claim 2 or 3, additionally comprising slitting and expanding the cooled planar strip into an expanded grid by rotary expansion.
7. A method as claimed in claim 2 or 3, additionally comprising forming the cooled planar strip into an expanded grid by reciprocating expansion, punching, machining, waterjet cutting, spark cutting or laser cutting.
- 20 8. A method as claimed in claim 4, rapidly cooling the extrusion under tension and winding the cooled extrusion into a coil.
9. A method as claimed in claim 4, additionally comprising slitting and expanding the cooled extrusion profile into an expanded grid by rotary expansion.
10. A method as claimed in claim 4, additionally comprising forming the cooled  
25 extrusion profile into an expanded grid by reciprocating expansion, punching, machining, waterjet cutting, spark cutting or laser cutting.
11. An extruded lead alloy strip for battery electrodes produced by the method of any of claims 1 through 10.
12. An expanded grid produced by a method according to any of claim 6, 7, 9 or 10  
30 for use as a battery electrode.

13. A lead acid battery having a plurality of battery electrodes produced by a method according to any of claim 6, 7, 9 or 10.

2025.02.27 10:22:40